

17 March 2020

Ms. Leslie A. Howard, Remedial Project Manager, HPNS Base Realignment and Closure Program Management Office, West 33000 Nixie Way, Bldg. 50 San Diego, California 92147

Subject: Monthly Landfill Gas Monitoring Letter Report for February 2020 Post-Removal Action, Parcel E-2 Industrial Landfill Hunters Point Naval Shipyard, San Francisco, California

Dear Ms. Howard,

The monthly landfill gas monitoring event at Parcel E-2 was performed on Tuesday, February 18, 2020. Monitoring was performed using a GEM-2000 landfill gas analyzer and a photo-ionization detector at gas monitoring probe locations GMP08A, GMP23 and GMP24. GMP08A is located along the fence line (east side) of the perimeter of the landfill while GMP23 and GMP24 are located within the UCSF compound as shown on Figure 1.

The results for the routine monthly monitoring event were as follows:

## Methane

• Methane was detected by the field monitoring equipment only in the gas sample extracted from GMP24 at 0.7% by volume in air.

• Methane was not detected in the gas samples from GMP08A and GMP23.

Per the project's Final Interim Landfill Gas Monitoring and Control Plan<sup>1</sup>, the methane action levels are as follows:

- The HPNS action level for GMPs along the fence line, in the UCSF compound, and along Crisp Ave. is 2.5% by volume in air.
- The regulatory action level for the concentration of methane gas migrating from the landfill must not exceed 5% by volume in air at the property boundary or an alternative boundary approved in accordance with 27 CCR §20925.

Since all methane readings were below the action levels during this monitoring period, no further action is required.

<sup>&</sup>lt;sup>1</sup> Tetra Tech, 2004. Final Interim Landfill Gas Monitoring and Control Plan, Parcel E, Industrial Landfill, Hunters Point Shipyard, San Francisco, California. August 13.



## Non-Methane Organic Compounds (NMOCs)

• NMOCs were not detected by the field monitoring equipment in any of the samples from GMP08A, GMP23, or GMP24.

Per the project's Final Interim Landfill Gas Monitoring and Control Plan (Tetra Tech, 2004), the NMOC action level at these locations is as follows:

• 500 ppmv in GMPs

Since all NMOC readings were below this action level during the monitoring period, no further action is required.

## **Monitoring-Related Notes**

• The GEM-2000 landfill gas analyzer was checked for calibration before and after this monitoring event

The above monitoring information will be included in the Quarterly Report for the first quarter of calendar year 2020, to be prepared in April 2020.

The field data (Table 1) and a map showing monitoring point locations for this project (Figure 1) are included in this report. Please let me know if you have comments or questions about this monitoring event or the data included herein. You can reach me at (949) 887-2615 or by e-mail at derrick.coleman@inyainc.com.

Sincerely,

Derrick Coleman, Ph.D.

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Inya Inc., Senior Project Manager

Enclosures: Table 1. Landfill Gas Monitoring Log

Figure 1. Site Map and Landfill Gas Monitoring Locations

Table 1. Landfill Gas Monitoring Log

Weather: Clear, air temp. about 65 °F Name: Colin Rowland

Sampling Location						GEM-2000				PID			Notes
Location ID	Description (for example, GMP, Well, Carbon, Hydrosil)	Date	Time	Temp (°F)	Barometric Pressure (in. Hg)	Methane (%)	CO <sub>2</sub> (%)	O <sub>2</sub> (%)	Percent of LEL	Non- Methane VOCs (ppmv)	Bckgrd. NMOCs (ppmv)	Soil Gas Pressure (in. H <sub>2</sub> 0)	(e.g., active extraction, flow rate, probe damage, instrument issues)
GMP08A	Gas Monitoring Probe	2/18/20	10:48	78	30.13	0.0	4.3	0.0	0.0	0.0	0.0	0.0	
GMP23	Gas Monitoring Probe	2/18/20	10:55	68	30.13	0.0	12.5	1.5	0.0	0.0	0.0	0.0	
GMP24	Gas Monitoring Probe	2/18/20	11:02	62	30.13	0.7	11.3	0.0	16.0	0.0	0.0	0.0	

## Legend:

%: percent by volume in air NA: not applicable

°F: NMOC: non-methane organic compound

 $CO_2$ : carbon dioxide  $O_2$ : oxygen

GEM-2000: CES-LANDTEC landfill gas meter plD: photoionization detector in. Hg: inches of mercury ppmv: parts per million by volume in. H<sub>2</sub>O: volatile organic compound

LEL: lower explosive limit

